



Dairy Farms Five Year Summary

1983 - 1987



1983-1987

NOVA SCOTIA DAIRY FARM

BUSINESS SUMMARY REPORT

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FOREWORD

This report provides a summary of the business performance of Nova Scotia dairy farms over a five year period, 1983-1987 inclusive. Data used in the preparation of this summary was obtained from the Nova Scotia Dairy Farm Business Summaries prepared in each of the five years included in this report.

As noted in the Dairy Farm Business Summaries, the farms used were not selected on a random sample basis, but rather volunteered their information. Hence, care should be exercised in the interpretation and use of the results shown in this summary.

The main purpose of this summary is to provide basic information on the dairy industry, at the farm level, in Nova Scotia over a five year period. Trends in incomes, costs, net returns, efficiency and management factors are outlined.

The co-operation of the dairy producers whose business information has been used to prepare this summary is gratefully acknowledged. Thanks are also extended to Tracey Mitchell, who did the typing for this report.

The authors accept full responsibility for any errors which may appear in the final report.

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SECTION A

SUMMARY

SUMMARY

This report provides information on trends that have occurred at the farm level in the Dairy Industry over the five year period, 1983-1987 inclusive. As noted earlier, the farms used to provide the basic data were not selected on a random sample basis. However, even with this noted limitation, the information contained in this summary can be used with care to provide useful trend data regarding the dairy industry in Nova Scotia.

The material is presented in the following manner - a brief summary of ratios, cost and return data, and management factors on a per farm, per cow and per hectolitre basis. The format used for presentation of information is similar to that used in the annual Dairy Farm Business Summaries.

In reviewing information contained in Table A-1, a number of observations can be made. Gross Farm Income has increased in each of the five years with an overall increase of some 30 percent over the five year period. At the same time, costs have increased 19 percent over this period. Net Farm Income has more than doubled over the five year period.

Production per cow has shown an increase over the five years, with the change over the period being 12.8 percent. Milk sold per man equivalent has increased by 13.5 percent over the period, with no increase occurring in the last year.

In terms of prices received from milk, this figure has also changed over the period, from an average price of \$45.21 per hectolitre in 1983 to \$53.54 in 1987. This represents an increase, in percentage terms, of 18 percent. While returns have been increasing, costs have been on the rise as well. The cost of producing a hectolitre of milk averaged \$46.65 in 1983, while in 1987 this figure was \$51.39 - for a percentage change of 10 percent. The net return to the farmer was positive again in 1987 - that is, the gross return was greater than the cost. In 1987, the net return was \$2.15 per hectolitre.

The largest individual component of cost in producing milk is purchased dairy ration. On a per cow basis, this expense

has increased from \$683 in 1983 to \$711 in 1987, for a change of some 4 percent. On a per hectolitre of milk sold basis, the cost of feed decreased by \$.97 from \$12.57 in 1983 to \$11.60 in 1987.

Investment per cow has increased gradually over the period, with the increase over the five year period being 31 percent.

Return to total invested capital improved during the five year period, going from 7.2 percent in 1983 to 11.5 percent in 1987.

Capital turnover has remained relatively steady over the five year period, ranging from 1.5 in 1983 to 1.6 in 1987.

TABLE A-1: SUMMARY

ITEM	1983	1984	1985	1986	1987
Gross Farm Income	184286	205786	213631	225127	239440
Total Farm Expenses	164257	184025	186869	189725	196115
Net Farm Income	20029	21761	26762	35403	43325
Labor & Management Income	9216	9548	14002	18306	25505
# of Cows/Farm	61	64	64	64	63
Production/Cow (L)	5434	5667	5640	5807	6127
Cows/Man Equivalent	23	23	23	25	24
Milk Sold/Man Equiv. (HL)	1271	1304	1274	1442	1442
Receipts From Milk/HL	45.21	47.41	49.83	51.59	53.54
Cost of Producing Milk/HL	46.65	48.98	50.32	51.10	51.39
Net Return/HL	-1.44	-1.58	-0.49	.50	2.15
Variable Cost as % of					
Total Cost	66	67	67	64	62
Fixed Cost as % of					
Total Cost	20	20	20	21	23
Opportunity Cost as % of					
Total Cost	14	13	13	15	15
Purchased Feed/Cow (\$)	683	770	760	764	711
Feed Cost/HL Milk (\$)	12.57	13.59	13.48	13.16	11.60
Feed Cost as % of					
Milk Sold (%)	27.8	28.7	27.1	25.5	21.7
Investment/Cow (\$)	4506	4779	4920	5449	5902
Return on Investment (%)	7.2	7.5	8.7	9.8	11.5
Capital Turnover (Yrs)	1.5	1.5	1.5	1.6	1.6

SECTION B

PER FARM ANALYSIS

INCOME

Total farm receipts increased from an average of \$178,879. in 1983 to \$241,059. in 1987, an increase of 35 percent.

Income from milk and milk subsidies accounted for 86 percent of Total Farm Receipts in 1987, up marginally from 84 percent in 1983.

TABLE B-1: INCOME

ITEM	1983	1984	1985	1986	1987
Milk Sales	143727	164837	173997	186722	199573
Milk Subsidy	6081	7190	6503	6649	7293
Livestock Sales	13308	14140	15266	15193	18181
Crop Sales	2966	2808	2935	1905	2196
Miscellaneous	12797	14205	12028	11786	13816
TOTAL FARM RECEIPTS	178879	203179	210728	221624	241059

EXPENSES

Expenses on a per farm basis increased from an average of \$145,311. in 1983 to \$170,898. in 1987. This represents a change of some 17.6 percent in Cash Expenses. Purchased dairy feed, the largest single cost item accounted for 26 percent of Cash Expenses in 1987.

TABLE B-2: EXPENSES

ITEM	1983	1984	1985	1986	1987
Dairy Feed	41637	49299	48840	49169	44818
Livestock Purchased	4747	4713	4858	4150	3722
Milk Hauling	5470	6127	6069	6697	7191
Crop Expenses	10946	11765	11428	11160	12361
Tractor & Machinery	9919	11351	12541	11356	12356
Truck & Auto	3541	3116	3276	2728	2911
Interest	14363	16799	17059	17861	19046
Labor	13828	16304	17648	17019	18907
Taxes & Insurance	3617	3880	3903	4559	4673
Milk Marketing Costs	8476	10274	10049	11742	12545
Dairy Supplies	3801	4089	4187	4793	5000
Vet & Drugs	1884	2026	2136	2201	2499
Breeding	1913	2152	2432	2507	2521
Building & Fence Repairs	3849	4079	4034	4181	4149
Utilities	4529	5053	5506	4768	4663
Custom Work)	-	-	-	-	4592
Rentals & Leases) *	-	-	-	-	2548
Miscellaneous)	12791	12347	11509	11370	5894
TOTAL CASH EXPENSES	145311	163372	165476	166261	170898

* Prior to 1987, custom work, as well as rentals & leases, were included in miscellaneous expense.

INCOME SUMMARY

In reviewing different measures of income over the five (5) year period, it can be noted that the trend of increasing income carried through to these levels as well. Net Cash Income has increased by some 109 percent over the period from \$33,568. in 1983 to \$70,161. in 1987. Net Farm Income has also increased from \$20,029. in 1983 to \$43,325. in 1987, an increase of 116 percent.

Labor and Management Income has shown significant increases over the last five years, from \$9216. in 1983 to the 1987 value of \$25,505.

TABLE B-3: INCOME SUMMARY

ITEM	1983	1984	1985	1986	1987
Total Farm Receipts	178879	203179	210728	221624	241059
Total Cash Expenses	145311	163372	165476	166261	170898
NET CASH INCOME	33568	39807	45251	55363	70161
Plus: Inventory Change	5407	2606	2903	3503	-1619
Less: Depreciation	18946	20653	21393	23464	25217
NET FARM INCOME	20029	21761	26762	35403	43325
Less: Value of Unpaid Family Labor	569	556	616	2493	2437
Interest on Net Worth @ 10%	10244	11657	12144	14604	15383
LABOR & MANAGEMENT INCOME	9216	9548	14002	18306	25505

SECTION C

PER COW ANALYSIS

INCOME

When figures are calculated on a per cow basis, Total Farm Receipts have increased by 30 percent over the five (5) year period - from \$2,934. in 1983 to \$3,822. in 1987.

TABLE C-1: INCOME PER COW

ITEM	1983	1984	1985	1986	1987
Milk Sales	2357	2575	2709	2893	3164
Milk Subsidy	100	112	101	103	116
Livestock Sales	218	221	238	236	288
Crop Sales	49	44	46	30	35
Miscellaneous	210	222	187	183	219
TOTAL FARM RECEIPTS	2934	3173	3281	3445	3822

EXPENSES

Over the five (5) year period, Cash Expenses have increased from \$2,383. per cow in 1983 to \$2,710. in 1987 - a change of \$327. per cow or some 14 percent.

TABLE C-2: EXPENSES PER COW

ITEM	1983	1984	1985	1986	1987
Dairy Feed	683	770	760	764	711
Livestock Purchased	78	74	76	65	59
Milk Hauling	90	96	94	104	114
Crop Expenses	180	184	178	173	196
Tractor & Machinery	163	177	195	177	196
Truck & Auto	58	49	51	42	46
Interest	236	262	266	278	302
Labor	227	255	275	265	300
Taxes & Insurance	59	60	61	71	74
Milk Marketing Costs	139	160	156	183	199
Dairy Supplies	62	64	65	75	79
Vet & Drugs	31	32	33	34	40
Breeding	31	34	38	39	40
Building & Fence Repairs	63	64	63	65	74
Utilities	74	79	86	74	74
Custom Work)	-	-	-	-	73
Rentals & Leases) *	-	-	-	-	40
Miscellaneous)	210	193	179	177	93
TOTAL CASH EXPENSES	2383	2552	2576	2585	2710

* Prior to 1987, custom work and rentals & leases were included with miscellaneous expenses.

INCOME SUMMARY

Net Cash Income on a per cow basis has increased by \$562. or by 102 percent over the period. Net Farm Income has increased by \$358. per cow between 1983 and 1987.

A significant increase in Labor and Management Income occurred over the five (5) year period. The 1987 per cow figure shows an increase of 42 percent over the 1986 level, and an increase of 166 percent over the five year period.

TABLE C-3: INCOME SUMMARY PER COW

ITEM	1983	1984	1985	1986	1987
Total Farm Receipts	2934	3173	3281	3445	3822
Total Cash Expenses	2383	2552	2576	2585	2710
NET CASH INCOME	551	621	705	861	1113
Plus: Inventory Change	89	41	45	54	-26
Less: Depreciation	311	323	333	365	400
NET FARM INCOME	329	340	417	550	687
Less: Value of Unpaid Family Labor	9	9	10	39	39
Interest on Net Worth @ 10%	168	182	189	227	244
LABOR & MANAGEMENT INCOME	152	142	218	285	404

SECTION D

PER 100 LITRES ANALYSIS

INCOME

Analysis of Total Farm Receipts on a per hectolitre of milk sold basis indicates that Farm Receipts have increased by \$ 8.40 per hectolitre over the period. This translates to a change of 16 percent.

TABLE D-1: INCOME PER HECTOLITRE

ITEM	1983	1984	1985	1986	1987
Milk Sales	43.37	45.43	48.03	49.81	51.66
Milk Subsidy	1.84	1.98	1.80	1.78	1.89
Livestock Sales	4.02	3.90	4.21	4.07	4.71
Crop Sales	0.90	0.77	0.81	.51	.57
Miscellaneous	3.88	3.91	3.32	3.16	3.58
TOTAL FARM RECEIPTS	53.99	55.99	58.17	59.33	62.39

EXPENSES

Cash Expenses increased by \$.37 on a per hectolitre of milk sold basis over the five (5) year period. In percentage terms, this represents a change of slightly less than 1 percent.

TABLE D-2: EXPENSES PER HECTOLITRE

ITEM	1983	1984	1985	1986	1987
Dairy Feed	12.57	13.59	13.48	13.16	11.60
Livestock Purchased	1.43	1.30	1.34	1.11	0.96
Milk Hauling	1.65	1.69	1.68	1.79	1.86
Crop Expenses	3.30	3.24	3.15	2.99	3.20
Tractor & Machinery	2.99	3.13	3.46	3.04	3.20
Truck & Auto	1.07	0.86	0.90	0.73	0.75
Interest	4.33	4.63	4.71	4.78	4.93
Labor	4.17	4.49	4.87	4.56	4.89
Taxes & Insurance	1.09	1.07	1.08	1.22	1.21
Milk Marketing Costs	2.56	2.83	2.77	3.14	3.25
Dairy Supplies	1.15	1.13	1.16	1.28	1.29
Vet & Drugs	0.57	0.56	0.59	0.59	0.65
Breeding	0.58	0.59	0.67	0.67	0.65
Building & Fence Repairs	1.16	1.12	1.11	1.12	1.20
Utilities	1.37	1.39	1.52	1.28	1.21
Custom Work)	-	-	-	-	1.19
Rentals & Leases) *	-	-	-	-	0.66
Miscellaneous)	3.86	3.40	3.18	3.04	1.53
TOTAL CASH EXPENSES	43.86	45.02	45.68	44.51	44.23

* Prior to 1987 custom work and rentals & leases were included with miscellaneous expenses.

INCOME SUMMARY

An analysis of income on a per hectolitre of milk sold basis reveals Net Cash Income increased by \$8.03 over the five (5) year period. Net Farm Income shows an increase of \$5.16 per hectolitre over the five (5) year period.

Labor and Management Income shows a significant increase of \$3.81 per hectolitre over the period.

TABLE D-3: INCOME SUMMARY PER HECTOLITRE

ITEM	1983	1984	1985	1986	1987
Total Farm Receipts	53.99	55.99	58.17	59.33	62.39
Total Cash Expenses	43.86	45.02	45.18	44.51	44.23
NET CASH INCOME	10.13	10.97	12.49	14.82	18.16
Plus: Inventory Change	1.63	0.72	0.80	0.94	-0.42
Less: Depreciation	5.72	5.69	5.91	6.28	6.53
NET FARM INCOME	6.05	6.00	7.39	9.48	11.21
Less: Value of Unpaid Family Labor	0.17	0.15	0.17	0.67	0.63
Interest on Net Worth @ 10%	3.09	3.21	3.35	3.91	3.98
LABOR & MANAGEMNT INCOME	2.79	2.64	3.87	4.90	6.60